

Amendments to the Claims:

Please amend the claims as follows:

Claims 1-4 (Canceled).

Claim 5 (Currently Amended): ~~The image reading apparatus, as claimed in claim 1,~~

An image reading apparatus, comprising:

photoelectrically converting means for photoelectrically converting image information obtained from optically reading an original image, line by line, and outputting an image signal, said photoelectrically converting means having optically shielding means provided at a portion thereof; and

black shading correcting means for correcting the image signal using a black reference level, said black reference level being obtained from said portion of said photoelectrically converting means for each line during an operation of the reading of the original image,

wherein the black reference level used by said black shading correcting means for each line is obtained using black reference values, each of the black reference values being data of said portion of said photoelectrically converting means for a respective one of a plurality of lines,

wherein the black reference level is a moving average of the black reference values.

Claim 6 (Original): The image reading apparatus, as claimed in claim 5, wherein the black reference level for a respective line is an average of pixel values in a main scan

direction, the moving average being obtained from moving-averaging, in a sub-scan direction, the black reference values.

Claim 7 (Currently Amended): ~~The image reading apparatus, as claimed in claim 1,~~

An image reading apparatus, comprising:

photoelectrically converting means for photoelectrically converting image information obtained from optically reading an original image, line by line, and outputting an image signal, said photoelectrically converting means having optically shielding means provided at a portion thereof; and

black shading correcting means for correcting the image signal using a black reference level, said black reference level being obtained from said portion of said photoelectrically converting means for each line during an operation of the reading of the original image,

wherein the black reference level used by said black shading correcting means for each line is obtained using black reference values, each of the black reference values being data of said portion of said photoelectrically converting means for a respective one of a plurality of lines,

wherein the black reference level for each line is obtained from moving-averaging the black reference values for the plurality of lines.

Claim 8 (Original): The image reading apparatus, as claimed in claim 7, wherein the plurality of lines comprise the current line and preceding lines.

Claims 9-12 (Canceled).

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Claim 13 (Currently Amended): ~~The image reading apparatus, as claimed in claim 9,~~
An image reading apparatus, comprising:

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a photoelectric unit which photoelectrically converts image information obtained from
optically reading an original image, line by line, and outputs an image signal, said
photoelectric unit having an optically shielding member provided at a portion thereof; and

a black shading correcting unit which corrects the image signal using a black
reference level, said black reference level being obtained from said portion of said
photoelectric unit for each line during an operation of the reading of the original image,

wherein the black reference level is obtained using black reference values, each of the
black reference values being data of said portion of said photoelectrically converting means
for a respective one of the plurality of lines,

wherein the black reference level is a moving average of the black reference values.

Claim 14 (Original): The image reading apparatus, as claimed in claim 13, wherein
the black reference value for a respective line is an average of pixel values in a main scan
direction, the moving average being obtained from moving-averaging, in a sub-scan
direction, the black reference values.

Claim 15 (Currently Amended): ~~The image reading apparatus, as claimed in claim 9,~~
An image reading apparatus, comprising:

a photoelectric unit which photoelectrically converts image information obtained from
optically reading an original image, line by line, and outputs an image signal, said
photoelectric unit having an optically shielding member provided at a portion thereof; and

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a black shading correcting unit which corrects the image signal using a black reference level, said black reference level being obtained from said portion of said photoelectric unit for each line during an operation of the reading of the original image,

wherein the black reference level is obtained using black reference values, each of the black reference values being data of said portion of said photoelectrically converting means for a respective one of the plurality of lines,

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wherein the black reference level for each line is obtained from moving-averaging the black reference values for the plurality of lines.

Claim 16 (Original): The image reading apparatus, as claimed in claim 15, wherein the plurality of lines comprise the current line and preceding lines.
